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Architectural Firms in Nigeria: A Study of Organizational Culture and Determinants

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Architectural Firms in Nigeria: A Study of Organizational Culture and Determinants

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I. Introduction

There is a growing body of research on the culture of service firms, (Chatman and Jehn, 1994); and a few of these studies focus on the culture of firms in the construction industry (Nummelin, 2006). Organizational culture has been shown to be an important component of the firm; serving very important functions. One of the reasons why the study of organizational culture is important is that it prompts researchers to question commonly held assumptions about organizations and their values contributes to organizational functioning (Racelis, 2005). Two functions of organizational culture that have been identified in literature are, to ensure the survival and adaptation of the firm to the external environment and to ensure its internal integration (Schein, 1985). Scholars (Denison, 1990 and Alvesson, 2002)) further subdivided the functions of culture. The proposed subdivisions by the aforementioned authors include conflict reduction; coordination and control; reduction of uncertainty, motivation and a source of competitive advantage. In addition to these, Baker, (2002) noted that culture in organizations promotes knowledge management, creativity, participative management, and leadership. An important aspect of culture, which serves these functions, is shared values (Chatman and Jehn, 1994). This is because members of the firms are responsible for delivering services. O' Reilly (1989) specifically stated that service firms direct members' actions by social control mechanisms such as cultural values.

Various factors influence a firm's organizational culture and different factors influence the organizational culture across firms of different industries (Cameron and Quinn 1999; Chatman and Jehn 1994). The factors that these authors propose include the external factors such as economic, political and clients' requirements. The internal factors include the size and age of the organizations as well as leadership styles of the managers. Wright (2005) demonstrated the influence of industry on organizational culture. This suggests that each industry should be studied to identify their peculiar organizational culture as well as the factors, which influence their culture. Despite the importance of understanding organizational culture however, there is a dearth of information on the culture of architectural firms. It is in light of this that we attempt to investigate the peculiar cultural values of architectural firms.

There have been differing definitions of the concept of culture. Various definitions include *shared assumptions or values (Cameron and Quinn, 1999; Reino and Vadi, 2010), meanings (Schein, 2004), symbols (Ouchi, 1981), and rituals (Pettigrew, 1979)*. Within organizations, culture is also manifested in organizational stories, jargon, humor, workplace arrangements, artifacts, formal structure, policies, and other explicit or inferred characteristics of culture. We adopt the description of culture proposed by Denison (1990), which states that culture entails the underlying values, beliefs, and principles that serve as a foundation for an organization's management system. These principles and practices endure because they have meaning to the members of an organization.

In this paper, we posed the following questions: What are the dominant values, which characterize the culture of architectural firms in Nigeria; and which characteristics of the architecture firms influence the values of the firms? By examining culture within the architectural firm as a professional service firm, this

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paper seeks to contribute to the literature in two ways. We intent to contribute to literature by presenting an industry- specific account of culture, thereby re-evaluating the generalizations of previous culture findings and the assertions that architecture firms are different from other professional organizations (Blau, 1984). In addition, we identify the specific characteristics of the architectural firms, which influence their cultural values.

II. Organizational Culture as Values

From the mention of organizational culture by Pettigrew in 1979, the study of organizational culture has been conceptualized in different ways. The concepts that stem from organizational theory include classical management perspective, which views organizations as social instruments for task accomplishment; and the contingency perspective, which views organizations as adaptive organisms existing by process of exchange with the environment (Smircich, 1983). Other perspectives in the study of organizational culture include symbolic, transformational, and cognitive organizational perspectives. While the symbolic organizational perspective views the organization as patterns of symbolic discourse, which facilitates shared meanings and values, the transformational perspective conceptualizes organizational forms and practices as manifestations of unconscious processes. The cognitive perspective in the study of organizational culture, which we adopts, views the organization as relying on a network of subjective meanings that organizational members share. This perspective views culture as an organizational variable that expresses the values and beliefs that organizational members have come to share. It is a way of perceiving and organizing phenomena, events, behavior and emotions (Smircich, 1983). In the cognitive perspective, thoughts are conceptualized as linked to actions.

Using the cognitive approach to the study of culture, we conceptualize culture as strongly held values. Reino and Vadi (2010) noted that values reflect the beliefs and understandings of individuals and groups about the means and ends of the organization. Value is a core element of culture and has therefore been the focus of most of the studies of organizational culture. Value, as defined by Enz (1988), is the beliefs held by individuals or group regarding the means and ends that organizations should identify in running of the enterprise and in choosing business actions. Enz further argued that norms, symbols, rituals, and other cultural activities revolve around values. These values form the heart of, and are used by organizational members to depict culture to themselves and to others (Schein, 2004). Although values are neither attitudes nor behaviours, (Stackman, Pinder and Connor, 2000), they set patterns for activities, opinions and actions (Ouchi, 1981).

Various dimensions of culture have been studied in literature. One of those dimensions is stability versus change, and innovation versus personal growth. This dimension relates to the propensities that individuals have towards stability or change (Hofstede et al, 1990). Denison and Mishra, (1995) suggested that innovation take priority when organizations try to promote risk, while organizations that are risk-averse focus personal growth. Culture is also conceptualized in terms of orientation and focus of organizations. This is related to whether the organization focuses on the people and processes within the organization or on the customers, competitors and the environment (Denison and Mishra, 1995). The dimension of orientation to work, task and co-workers was studied by O'Reilly, Chatman and Caldwell, (1991), and their studies focused on the balance between work as a production activity and as a social activity. The dimension of isolation versus cooperation relates to whether individuals accomplish most of the work or a premium is placed on collaboration or teamwork in an organization (Denison and Mishra, 1995).

Three popular approaches to measuring culture were identified in literature. The most popular was the Competing Value Framework (Cameron and Quinn, 1999). This was developed from Quinn and Rohrbaugh's Organizational Culture Assessment Instrument of 1981. With this framework, the authors argue that we can best understand organizational effectiveness when we organize it around opposite ends of flexibility and control, and internal and external orientations. Several studies have used this approach to determine type and strength of culture. The second approach called the Critical Incident Technique (Mallak et al, 2004) describes culture by identifying good and poor service episodes. The third approach, which is most relevant to this study, was the Organizational Culture Profile (O'Reilly, Chatman and Caldwell, 1991), which characterizes organizational culture in terms of values. The approach identifies a range of relevant values and assesses how strongly held and widely shared they are. We consider this approach most relevant to this study, since the aim is identifying the dominant culture of architectural firms in Nigeria and their determinants. O'Reilly, Chatman, and Caldwell (1991) identified seven dimensions of culture. Rousseau (1990), Chatman, and Jehn (1990) also found similar dimensions their studies. In fact, Saele (2007) noted that the dimensions give reasonable reliability and validity. The seven dimensions identified by O'Reilly, Chatman, and Caldwell (1991) are innovation, stability, people orientation, outcome orientation, detail orientation, team orientation, and aggressiveness. Researchers have also noted that dominance of cultural value dimensions varies between organizations. The characteristics specific to each organization may determine these variations (Reino and Vadi, 2010).

The factors that influence the culture of organizations are both internal and external (Reino and Vadi, 2010). The external factors include some values of the society and the organization's specific environment (Erez and Gati, 2004; Cameron and Quinn 1999). Gordon (1991) identified competitive environment and client requirements, while Chatman and Jehn, (1994) identified technology as some external factors that influence culture. Other factors that are external to organizations are the national economy, political climate, infrastructure, government policies. Some authors suggest that variations in organizational culture occur mainly due to internal pressures (Cameron and Quinn, 1999). Zahra, Hayton, and Salvato (2004) also noted that culture develops over time because of the dynamic interplay between the owners' values, organizational history, as well as the competitive environment of the firm's major industry. Vadi and Alas, (2006), who noted that irregularities in the manifestation of culture could be attributed to organizational variables, corroborated this. One of such organizational variables is the age firms (Cameron and Quinn, 1999). Van Wijk et al, (2007) proposed that older organizations tend to be more stable. In addition, Durand and Coeurderoy (2001) and Alas (2004) also argued that older organizations are inflexible and conservative. Another organizational variable is the size of the firm. Schein (2006) noted that large organizations might be innovative, as they possess diverse skills and capabilities. However, small organizations are more flexible, with higher ability to adapt to changes, which also facilitates innovation. Similarly, Flynn and Chatman, (2001) noted that larger organizations are more bureaucratic and therefore less flexible.

In addition, Dastmalchian et al (2000) found a correlation between organizational size and intra-organizational relationships such as organizational formalization and centralization. Miller and Droge (1986) defined formalization as the extent to which the rights and duties of the members of the organization are determined and the extent to which these are written down in rules, procedures and instructions. Centralization also refers to the extent to which decision-making power is concentrated in top management level of the organization. These intra-organizational relationship variables may also influence culture. Some researchers also argue that privatization leads to significant changes in the culture of organizations (Zahra and Hansen, 2000; Cunha and Cooper, 2002). Most of these studies were conducted in the context of organizations, which were formerly owned by the government but were privatized to investigate the change in organizational culture that resulted from change in ownership form. Ownership is however one aspect of the firms that have been suggested to influence the culture of organizations (Schein, 2004). Leadership is another factor, which has been said to influence culture. In fact, Schein (2004) observed that founders of organizations teach their values and beliefs to new members of the organizations. Reiman and Oedewald (2002) put it succinctly by noting that managers are the creators of principles and values in organizations. With architectural firms, the founders are often the managers. These suggest the need to investigate the influence of the ownership form as well as the leadership styles of principals of firms on the culture of the firms.

A number of assertions and conclusions have been made about the culture of service firms and architectural firms in particular. Hofstede et al (1990) suggested that all service sector organizations would be more people oriented than outcome oriented. Ren, (2005) also argued that architectural firm differed from other service firms because of the strong emphasis on creativity and self-identification. This, he said results in smaller firms, compared to other service firms. He also noted that there is strong emphasis on teamwork in architectural firms. One however wonders if the value of creativity will be more dominant than teamwork in architectural firms or vice-versa. We therefore explores the dominant cultural values of architectural firms in Nigeria, and the characteristics, which influence these cultural values.

III. Research Methods

We conducted the research on architectural firms in Nigeria. We used the firm as the unit of analysis. The total population is the total number of architectural firms registered to practice in Nigeria by the Architects Registration Council of Nigeria (ARCON). The ARCON register (2006) revealed that 341 firms were registered to practice in Nigeria. However, 77.7 percent of these firms were located in six cities which were Lagos, Abuja, Kaduna, Enugu, Port-Harcourt and Ibadan We used the purposive sampling method to select cities where the highest number of architectural firms. Lagos had more than 50% of registered architectural firms in Nigeria (ARCON, 2006). Lagos, which used to be the seat of government some years ago, is often described as the man industrial and commercial centre of Nigeria. Hosting the next highest number of architectural firms was Abuja, Nigeria's political capital, known as the most planned and systematically built city in Nigeria. Enugu, home of the next highest number or architectural firms is an industrially rich area, while Kaduna, a city in the study is known as the foremost commercial and industrial hub in the north of Nigeria, Port Harcourt is described as a chief trade centre of Nigeria and the last city in the study, Ibadan, south-west Nigeria, is also an important centre of trade.

We calculated the sample size using a formula derived by Franfort-Nachimias and Nachimias

(1992:189). This gave a sample size of 157 firms, each of which we gave the questionnaires to fill. We received 92 usable questionnaires back, which represented 58.6% return rate. We administered questionnaire to the principal or a senior staff in each firm, administering one questionnaire per firm. This is because Sarros et al (2005) suggested that managers and senior executives are in the position to express firms' cultural identities since they are also in position to determine it.

Before data collection, we carried out interviews where the key informants were principals of two firms. We then fine-tuned the questions on cultural values, which were relevant to architectural firms. The questionnaire consisted three parts. In the first part of the questionnaire, we obtained information about the general profile of the firms. In the second part, we asked respondents to indicate on a 5-point likert response format how applicable statements constructed from seven dimensions of culture obtained from the works of O'Reilly et al (1991) and Chatman and Jehn (1994) were to their firms. The questions were related to the innovation, outcome orientation, aggressiveness, team orientation, stability, attention to detail and people orientation dimensions of culture. Sarros, Gray, Densten and Cooper (2005), noted that the Likert scale provides a more versatile means to investigate individual perception of culture. On the scale, 1 represented Not Applicable at All, 2- Minimally Applicable, 3- Moderately Applicable, 4- Applicable and 5= Very Applicable. In the third section of the questionnaire, we also used the likert response format was also used. In this section, we asked questions about the perceptions of the respondents on the influence of external factors on their firms. The likert scale that we used was 1 for Not Influential At All, 2 for Not Influential, 3 for Undecided, 4 for Influential and 5 for Very Influential. Table I illustrates this sample categorized by a number of demographic variables.

Table 1 : Profile of respondents

		Percentage
Location of Firm	Kaduna	9.8%
	Lagos	54.4%
	Abuja	10.9%
	Enugu	13.1%
	Port-Harcourt	7.6%
	Ibadan	4.4%
Age of firm	up to 5 years	9.9%
	6-10 years	16.1%
	11-15 years	27.2%
	16-20 years	19.8%
	21-25 years	13.6%
	26 years and above	13.6%
Ownership Form	sole principal	52.3%
	partnership	21.6%
	limited liability company	17.1%
	unlimited liability company	8.0%
	public company	1.1%
Company size	1-5 staff	14.9%
	6-10 staff	33.3%
	11-20 staff	27.6%
	21-30 staff	8.1%
	31-40 staff	6.9%
	41-50 staff	5.8%
	51 staff and above	3.5%
Age of principal partner	below 30 years	1.1%
	30-40 years	22.4%
	41-50 years	43.5%
	51-65 years	27.1%
	above 65 years	5.9%
Years of experience of principal partner	up to 5 years	1.5%
	6-10 years	12.1%
	11-15 years	15.2%
	16-20 years	18.2%
	21-25 years	21.2%
	26 years and above	31.8%
Degree of Centralization of decision-making	low level of centralization	27.8%
	moderate level of centralization	31.9%
	high level of centralization	40.3%
Degree of formalization	informal	7.5%
	fairly formal	37.5%
	very formal	55.0%
Leadership style	mentor	9.3%
	visionary and innovative leader	38.4%
	efficient manager	11.6%
	productivity oriented achiever	40.7%

We use the Statistical Package for Social Scientists (SPSS) was used carry out a principal component analysis so as to identify the dominant cultural values of the architectural firms. With principal component analysis, we were able to discover the natural convergence and divergence of the variables investigated. This gave the underlying factors, which are uncorrelated, and best describe the cultural values of the architectural firms in the study (Pallant, 2011). We also carried out regression analysis to determine the firm characteristics, which influence cultural values. With this analysis, we investigated the probability that firm profiles and influences of the external factors will predict the dominant cultural values of the architectural firms in the study.

IV. Results

To test for the reliability of the variables used in measuring cultural values, we carried out a cronbach

alpha test. The results show that the variables were internally valid as the value of the cronbach alpha was 0.73, which according to George and Mallery (2003) is acceptable. For the principal component analysis, we used the variable principal normalization method, with the criteria for convergence set at 0.00001. The factor analysis of the cultural variables shows that three (3) factors accounted for 58.67% of the variance in the result. To arrive at the number of factors, we used the Kaiser criterion, which sets the eigenvalue for selection of factor at a minimum of 1. With this criterion, only factors with eigenvalue greater than 1 were selected. The component loadings revealed the variables that the factors represented. The first factor, which accounted for 31.14% of the variance in the data represented new ideas and technology as determinants of strategy of firms (0.74), teamwork and staff development (0.70), driving staff to achieve results (0.70), and staff expression of personal styles and initiative (0.68) (Table II). Other variables that loaded highly on first factor were gender equity in hiring (0.67), innovation (0.65) and gender equity in task allocation. We described this dimension as innovation and staff orientation. The second factor (accounting for 14.001% of the variance), which we described as stability dimension loaded highly on risk-aversiveness (0.82) and tradition (0.75), while the third factor (accounting for 13.52% of the variance) loaded highly on the concern for profit (0.82) and aggressiveness in the pursuit of business opportunity (0.62) and is described as business orientation dimension of culture.

Table 2 : Factors of Cultural Values of Architectural Firms

Factor Description	Variables Represented	Factor Scores
Factor 1: Innovation and staff orientation (31.1%)	New ideas and technology as determinants of strategy of firms	(0.74),
	Teamwork and staff development	(0.70)
	Driving staff to achieve results	(0.70)
	Staff expression of personal styles and initiative	(0.68)
	Gender equity in hiring	(0.67)
	Innovation	(0.65)
	Gender equity in task allocation	(0.57)
Factor 2: Stability (14.0%)	Risk-aversiveness	(0.82)
	Tradition	(0.75)
Factor 3: Business orientation (13.5%)	Concern for profit	(0.82)
	Aggressiveness in the pursuit of business opportunity	(0.62)

The three dimensions of cultural values of the architectural firms sampled were subjected to further analysis to determine the characteristics of the architectural firms, which determined the dominant cultural values We carried out three categorical regression analyses to find out the factors, which were most closely associated with the differences observed in the cultural values of the architectural firms. We entered each dimension of culture as the dependent variable while the age, size, ownership form, location, level of formalization and centralization of the firm, as well as the age, experience and leadership styles of the principal were entered as independent variables. We also entered the external factors that may influence the firms as independent variables. We present the summary of the determinants of culture of the architectural firms sampled in Table III. The F value for the innovation and staff orientation (p= 0.005), stability (p = 0.000) and business orientation (p = 0.000) were significant. The levels of description of the overall variation were 26.9%, 45.9% and 55.7% for innovation and staff orientation; stability, and business orientation respectively. The variables that did not significantly influence the innovation and staff orientation dimension of culture were the age of the principal, the size of the firm and the external influences from the professional body and infrastructure. The levels of formalization of office activities and centralization of decision-making did not significantly influence the innovation and staff orientation as well as the stability dimensions of culture of the architectural firms. Other variables that were not significant predictors of the stability dimension were the leadership style of principal and external influences from the architectural professional body, information technology, and infrastructure. Three external variables (influences of clients, concern about sustainable environment and political climate) and one internal factor (the level of formalization of decision-making) were however not significant predictors of the business orientation cultural dimension.

Table 3 : Cultural values and firm characteristics

Firm Characteristics	Cultural Value Dimensions		
	Innovation and staff orientation ^ R^2 = 0.27 F = 1.22 Sig = 0.005	Stability ^ R^2 = 0.46 F = 2.76 Sig =0.000	Business orientation ^ R^2 = 0.56 F = 3.54 Sig = 0.000
Ownership form	0.30*	0.32*	0.21*
Age of Firm	-0.24*	-0.32*	-0.29*
Location of Firm	-0.39*	-0.38*	0.63*
Size of Firm	-0.31	0.33*	-0.21*
Age of Principal Partner	-0.16	0.43*	-0.18**
Experience of Principal Partner	-0.41*	0.31*	0.41*
Level of Formalization of Office Activities	-0.00	0.13	0.41
Level of Centralization of Decision-Making	-0.11*	-0.03	0.40*
Leadership Style of Principal	0.16**	0.07	0.24*
Influence of clients	-0.31*	0.56*	0.18
Influence of architectural professional body	0.13	-0.14	-0.22*
Influence of advances in information technology	0.25**	-0.09	0.22*
Influence of the national economy	0.21**	-0.13**	0.23*
Influence of the political climate of the country	0.30*	-0.27*	-0.08
Influence of current privatization programmes	-0.55*	-0.16**	0.27*
Influence of government policies	0.35*	-0.21**	-0.28*
Influence of infrastructure	0.09	0.13	0.29*
Influence of increasing concern about sustainable environment	0.24*	-0.31*	-0.20
Influence of other professionals	-0.43*	0.23*	-0.14*

^ *The values were the adjusted R2 values*
* $p < 0.01$
** $p < 0.05$

We plotted the principal component analysis factor scores of all the firms on the three dimensions of culture against the firm characteristics as in Figures I to VIII. Since we already standardized the factor scores during principal component analysis, the mean score of each factor would be zero. When we plotted the factor score against the firm characteristics therefore, the scores of the firms varied from negative to positive. The graphs indicated how each factor score is ranked with each firm characteristic that we investigated. When we further examined the results, Figures I to VIII show that firms that rated business orientation high had younger principals, with few years of experience, while the firms that rated stability high had older principals, with higher number of years of experience. We also found that business orientation was rated high by principals who were described as efficient managers or productivity-oriented achievers; while innovation and staff management was rated high by principals who were described as mentors or visionary and innovative leaders. Small sized architectural firm (with 10 staff or less) in the architectural firms that we studied were business oriented. Similarly, sole principal firms rated business orientation high, while limited liability architectural firms rated innovation and staff orientation high. Unlimited liability architectural firms and public companies were however more stability oriented. We further found that old firms in the study were stability oriented; maturing firms (6-15 years) were business orientation high, while the very young firms were more innovation and staff oriented. It was interesting to note that the old and new capitals of Nigeria had firms which mostly valued innovation and their staff. Most of the firms in Port Harcourt are business-oriented while stability was valued by firms in Kaduna and Ibadan. We show in Figure IV that firms with low level of centralization of decision-making scored high in innovation and staff orientation while firms with high level of centralization scored high in business orientation.

Table 4 : Mean factor scores of firms on the influence of the external environment and the cultural value dimensions

External influences		Factor scores on dimensions of organizational culture		
		Innovation and staff orientation	Stability orientation	Business orientation
clients	Low	-0.43	**-0.16**	Not significant*
	High	**0.46**	-0.46	Not significant*
architectural professional body	Low	Not significant*	Not significant*	**0.25**
	High	Not significant*	Not significant*	-0.22
advances in information technology	Low	-0.89	Not significant*	**-0.28**
	High	**0.11**	Not significant*	0.07
national economy	Low	-0.15	**0.05**	-0.08
	High	-0.07	-0.05	**0.09**
political climate	Low	-0.18	**0.11**	Not significant*
	High	**0.02**	-0.15	Not significant*
privatization programmes	Low	-0.21	0.03	**0.06**
	High	**0.25**	-0.17	0.09
government policies	Low	-0.13	-0.12	**0.08**
	High	-0.10	**0.09**	0.04
infrastructure	Low	Not significant*	Not significant*	-0.07
	High	Not significant*	Not significant*	**0.11**
concerns about sustainable environment	Low	-0.14	**-0.01**	Not significant*
	High	**-0.07**	-0.12	Not significant*
other professionals	Low	-0.17	-0.10	**0.22**
	High	0.10	**0.11**	0.09

**(p>0.05)*

The results (Table IV) also show the cross tabulation of the mean factor score of the firms on the cultural dimensions and the external influences of the firms. Innovation and staff management is rated high by firms highly influenced by advances in information technology, political climate of the country, privatization programmes of the government and concerns for sustainable environment but weakly influenced by clients. With high client, government policies and other professionals' influences as well as weak influences from the economy, political climate and concern for sustainable environment, the firms rated stability very high. The firms that rated business orientation high were highly influenced by the economy of the country and infrastructure but weakly influenced by the professional body, information technology, privatization programmes, government policies and other professionals.

V. Discussions

In this study, we set out to investigate the dominant cultural values of architectural firms in Nigeria and the characteristics of the firms that are related to the level of adoption of those values. The findings that we obtained from the study conform to the argument of Hofstede et al (1990) that architectural firms are more people- oriented than outcome-oriented. The study however found that staff orientation and was factored together with innovation. It thus appears that with the architectural firms, innovation and staff orientation go together. This is probably stems from the dependency of the architectural firms to service the needs of clients. The grouping of innovation and staff orientation for the architectural firm is interesting because it suggests that the innovation in the firms is highly dependent on the staff. Cultural differences between the firms were greatest on innovation and staff orientation, which encompasses easygoingness identified by Chatman and Jehn (1994) as the greatest asset in consulting firms. Contrary to the findings of Chatman and Jehn however stability accounted for a greater difference between the firms than business orientation (termed outcome orientation).

The very young firms valued innovation and staff management, which changed to business orientation as they advanced in age, while the old firms valued stability. The findings of that we obtained in this study thus confirm the assertion of Van Wijk et al (2007), Alas (2004); and Durand and Coeurderoy (2001) that older firms are stability oriented and conservative. In addition to the age of the firm however, we find that the age of the principal also influenced their cultural values. In particular, older principals also scored stability high as a cultural value. This probably suggests a need for stability with age either of the principal or of the firm. It is however impossible to say if older firms and principals have explored and established a tradition and desire to sit back to consolidate. This is because we conducted a cross-sectional and not a longitudinal study. Firms with young principals however valued business orientation. It is interesting however that the innovation and staff orientation values of the architectural firm was influenced by the age of the firm, but not significantly influenced by the ages of the principal. It thus appears that the innovation and staff orientation value is more dependent on the age of the firm, than on the age of the principal.

The findings we obtained from this study further supports the argument of Flynn and Chatman (2001) and Schein (2006) that large organizations are less flexible and small ones. Large architectural firms scored stability higher than other cultural values. Small organizations however scored business orientation higher than other cultural values. The innovation and staff orientation value was however not significantly influenced by the size of the firms. It may thus appear that although other small organizations are more innovative than larger ones (Schein, 2006), the innovation value in architectural firms is not influenced by the sizes of the firms.

We, through this study were able to empirically support other suggestions in literature. One of the suggestions is that ownership will influence culture (Zahra and Hansen, 2000; and Cunha and Cooper, 2002). We found that the public company with shareholder funds and the unlimited liability company with propensity for personal indebtedness valued stability above other cultural values. The results that we obtained further suggested however, that the dominance of the value of stability is also a function of the age and the size of the firms. The most innovation and staff oriented firms were those with the limited liability form of ownership, while the sole principal firms were the most business oriented. It therefore appears that the sole principal firms, trying to make a maximum profit valued business orientation, while the limited liability firms could experiment knowing their losses will be limited. Another point in the literature that we empirically confirmed is that leadership influence culture (Reiman and Oedewald, 2002). Principals who were described as mentors and visionary and innovative leaders valued innovation and staff orientation above business orientations, while it was the other way round for principals whose leadership style was either efficient management or productivity oriented achievement. This also suggests that innovation in architectural firms goes with staff orientation. In addition to the leadership style of the principals, the experience of the principal also influenced the values of the firms. Principals with very few years of experience valued business above stability, while the highly experienced principals valued stability. Innovation and staff orientation was however rated high by all architectural firms irrespective of years of experience. It thus appear that although innovation and staff orientation value of the firms varied significantly with the leadership style of the principal, it did not vary with the age and experience of the principal. Instead, the stability value of the firms varied significantly with the age and experience of the principals, but not with the leadership style of the firms.

The results that we obtained also suggest that business-orientation is mostly a result of high level of centralization of decision-making. It thus appears that while decision-making may be centralized when a firm has high business oriented cultural value, participation is important when a firm aims at innovation as a dominant cultural value. The fact that firms in the old and new capitals of Nigeria mostly valued innovation and their staff may be because of the need for iconic, state of the art designs required by the commercial, administrative and industrial buildings in those locations. Port Harcourt, a city that host many multinational oil companies in Nigeria had architectural firms that were mostly business- oriented. This may be a reflection of the trade vibrancy of the city. This findings suggest that there may be a limit to generalization of organizational values (Reino and Vadi, 2010)

We were able to also confirm the assertion of Erez and Gati (2004) that some values of the society and the organization's specific environment influence the culture of organizations by the findings of this study. Strong influence of the economy and infrastructure motivated the architectural firms to be business-oriented. This suggests that firms which try to beat a downturn in the economy, in spite of infrastructural inadequacies focus on building business values. The business- orientation drive of the firms thus appears to be a survival strategy. It was also interesting to note that the innovation and staff-orientation drive of the firms become strong in the face of advances in information technology, political climate, privatization programmes of government and concerns for sustainability. It appears that these firms, in an attempt to take advantage of new issues become more innovative, hence staff-oriented, as the innovation of architectural firms have been shown to be linked to their staff. The results that we obtained also suggest that firms which are strongly faced with requirements of clients, government policies and stern competition from other professionals were stability-conscious.

VI. Conclusion

In this study, we investigated the cultural values of architecture firms and the characteristics of the architecture firms influence the cultural values they adopted. We found the underlying structure of the culture of architectural firms using the dimensions derived by O'Reilly et al (1991). There was a further convergence of the seven dimensions investigated to give three dimensions. In particular, innovation converged with staff orientation, and team orientation. By this study, we provide empirical evidence for the cognitive perspective of culture. The results that we found support the proposition of Zahra, Hayton and Salvato (2004) that culture of architectural firms developed from interplay of the characteristics of the owner, the firm and the firm's external environment. Factors both internal and external to the firms determined the cultural value that was dominant in the firms. The results that we found further provide evidence

for the assertion of Racelis (2005) that environmental changes necessitate cultural changes, and the cultural process is an adaptation to ecological and socio-political process, (Erez and Gati, 2004).

A major implication of these findings is that culture may be unique to each architectural firm as it is an adaptation to the owner and firm's characteristics as well as the external environment of individual firm. Culture may thus be a source of competitive advantage. The fact that innovation factored together with staff orientation may suggest that the workforce of architectural firms, apart from being critical asset because of their direct interaction with clients (Ettinger, 2009), are also an embodiment of the innovation of the firms. The results of the study also suggest that principals of firms faced with constraints of the economy and infrastructure may find it easy to adopt the business culture. Furthermore, the results suggest that new issues in the external environment of the firms may be tackled by adopting the innovation and staff- orientation cultural value, while those faced with requirements of clients, and government as well as competition from other professionals may strive for stability.

The results that we found in this study also show that the location of the firms influenced the dominant cultural values of the firms. This suggests that culture is place-specific and the adoption of culture should be based on the location of a firm. The factors within the states which influenced the culture of the firms were however not known. Further studies are required to investigate the factors within a location, which influences the culture of organizations.

There were also some limitations to the study. The firms that we sampled in this study were architectural service firms, which are professional service firms. These firms have peculiar characteristics (Maiser, 1993), thus, the results may not be applicable to other organizations. Although the use of questionnaire is a legitimate research approach, it does not capture more subtle aspects of culture. Further studies may also adopt other research methods to capture more subtle aspects of organizational culture. In addition, data for the empirical study were obtained from architectural firms in just one country. It may therefore not be representative of other countries. We did not investigate the fit between organizational culture, organizational characteristics, and external environment. Further studies may investigate this fit to see which cultural dimensions and organizational characteristics lead to higher performance in architectural firms.

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Firm Characteristics and Cultural Values

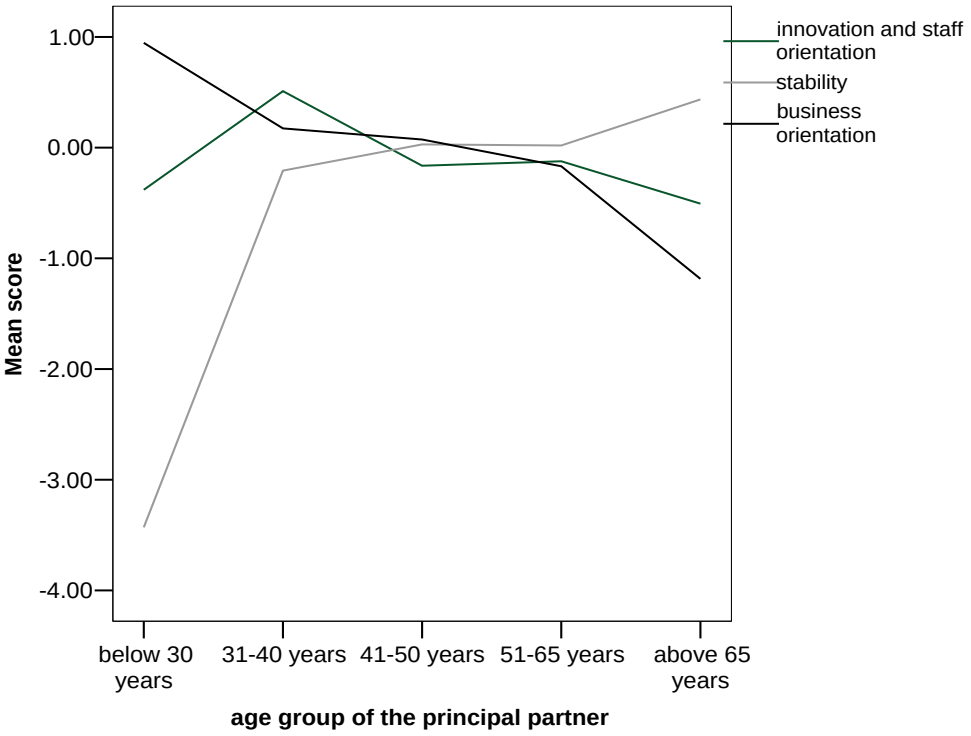

Figure 1 : Age of principal and cultural value

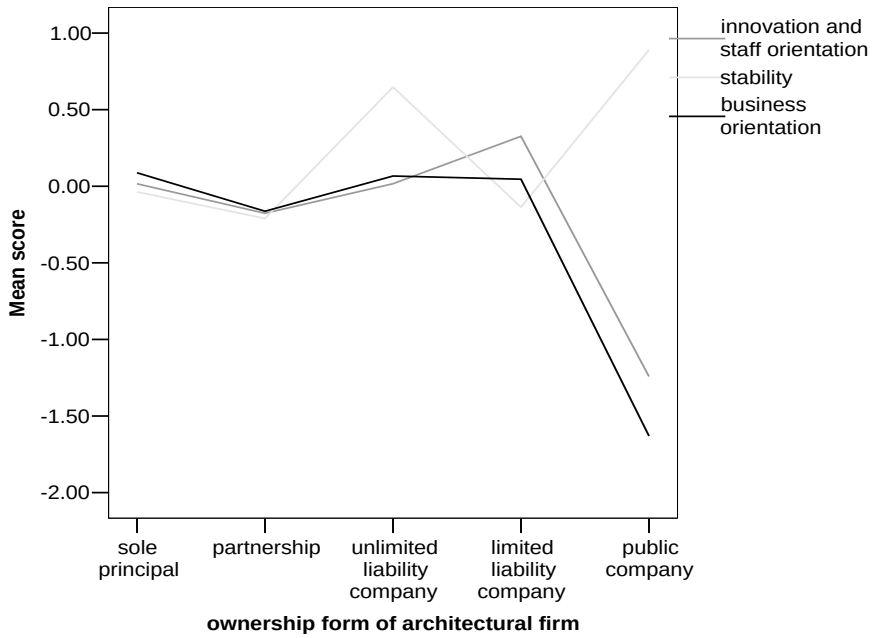

Figure 2 : Ownership of firms and cultural value

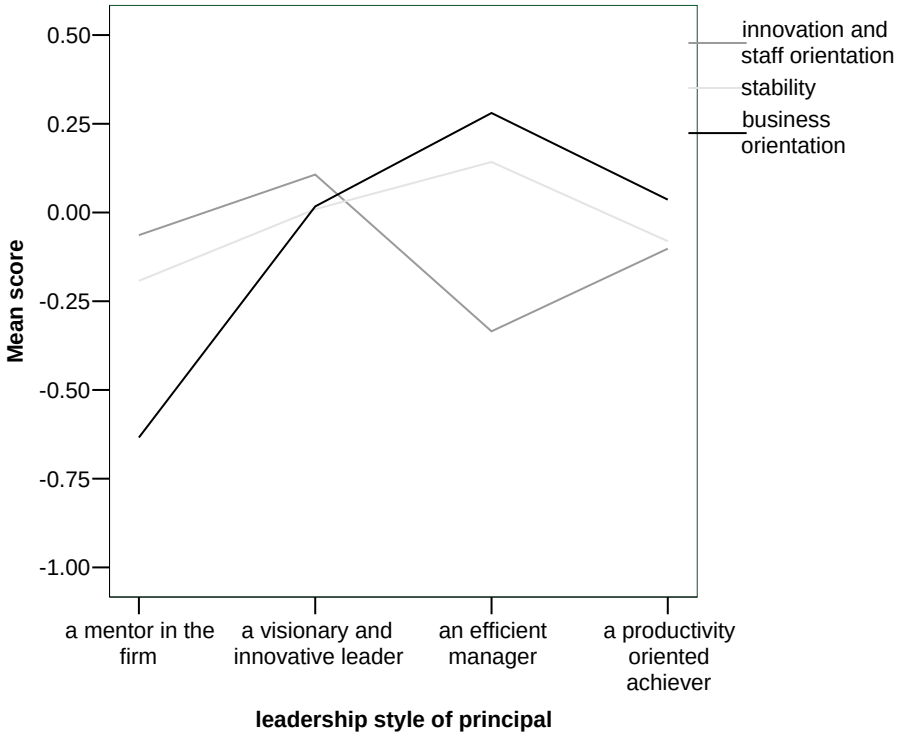

Figure 3 : Leadership style of principal and cultural value

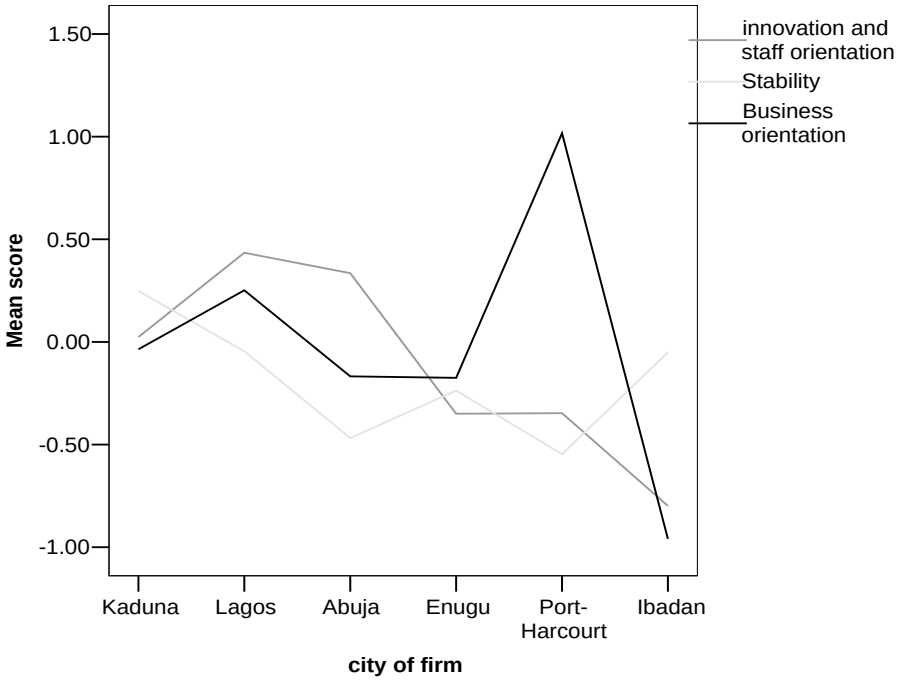

Figure 4 : Location of firm and cultural value

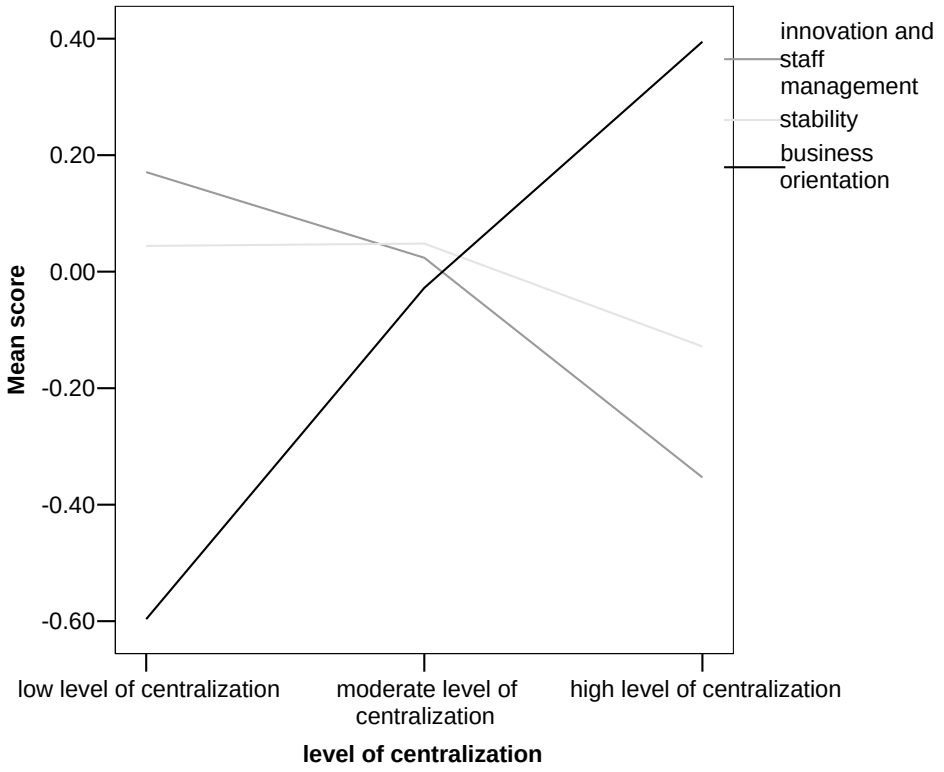

Figure 5 : Degree of centralization of decision-making and cultural value

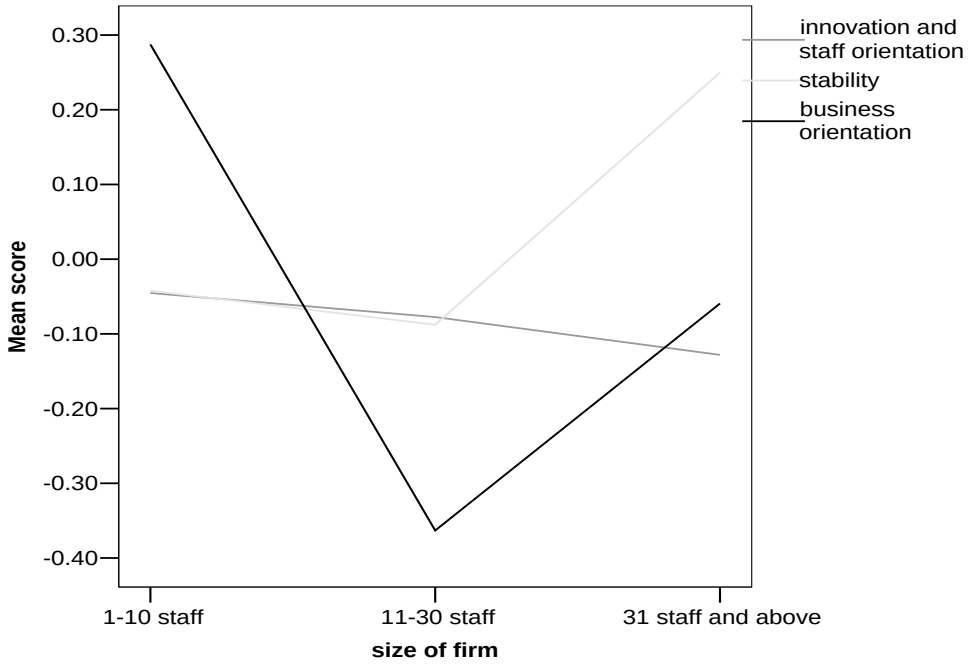

Figure 6 : Size of firms and cultural value

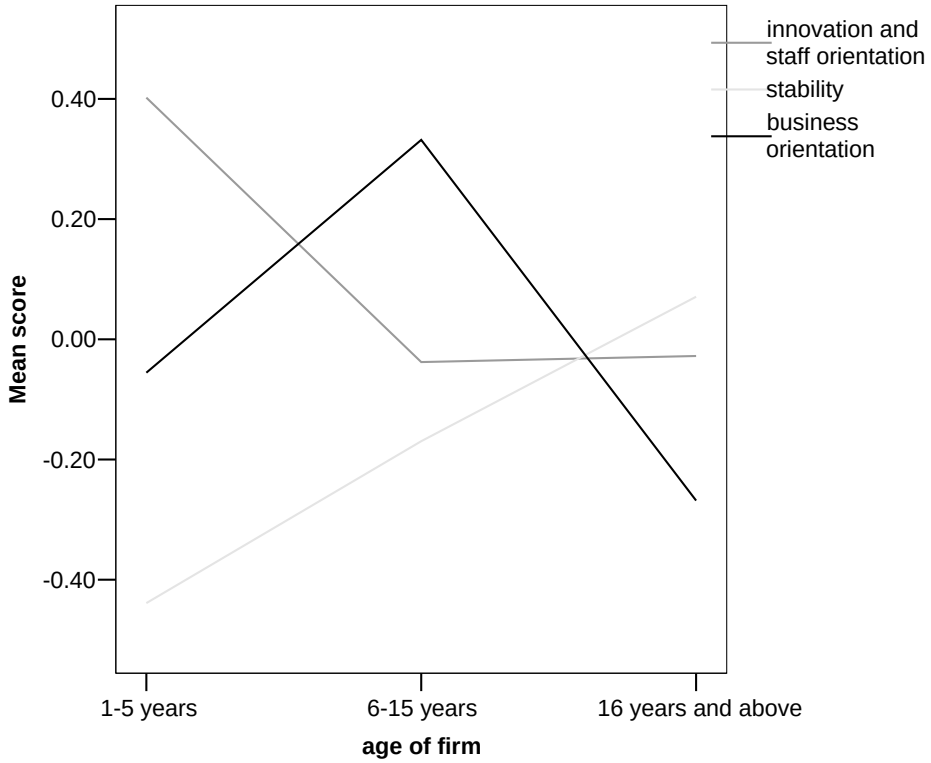

Figure 7 : Age of firm and cultural value

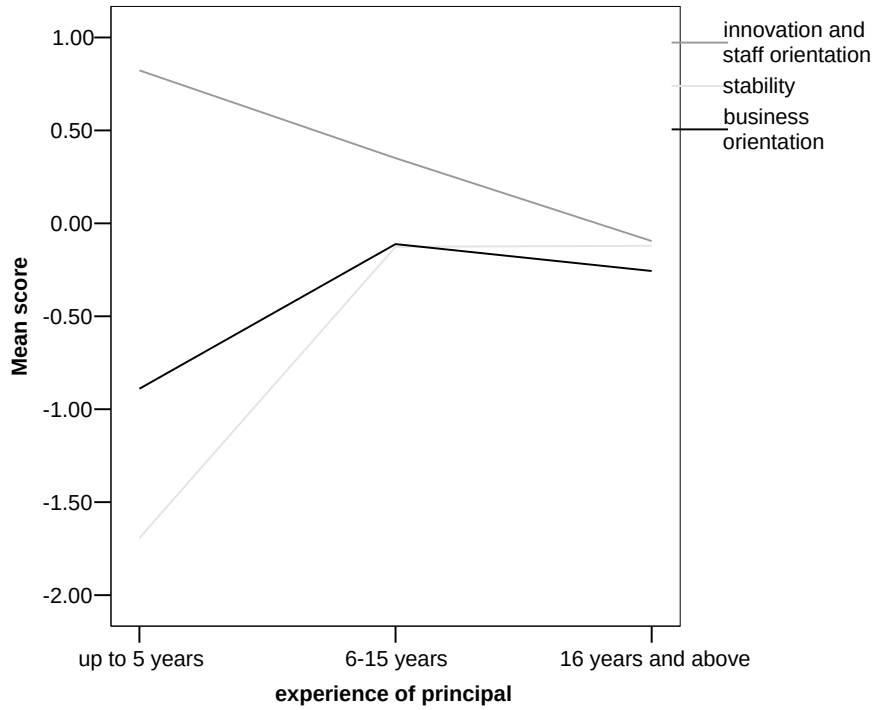

Figure 8 : Experience of Principal and Culture